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# JP01231877 DRINK

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#### Abstract:

PURPOSE: To obtain the title drinking water capable of effectively recovering fatigue after exercise and providing water by combining a main container charged with drinking fluid with an oxygen container and taking oxygen alone or a mixture of oxygen and the drink in drinking.

CONSTITUTION: A main container 2 which is charged with a drinking fluid L and closed is combined with an oxygen container 3 racked with oxygen A and in drinking, part of the oxygen container 3 is opened and oxygen A alone or in a mixed state with the drink is used to give the aimed drink.

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# JAPANESE PATENT OFFICE

Patent Application Laid Open

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Title of the Invention: A Drinker

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#### **SPECIFICATION**

#### 1. Title of the Invention

A drinker

#### 2. Scope of Patent Claims

A drinker characterised in that it combines an oxygen container filled with oxygen with a main container that is sealed and filled with a liquid drink and part of the oxygen container is opened during drinking; and it is made so that oxygen is drawn in alone or imbibed in a state where it is mixed with the liquid drink.

# 3. Detailed Explanation of the Invention

Aim of the Invention

# Field of Industrial Application

The present invention relates to a drinker which combines a liquid drink readily absorbable by the digestive organs, for example, one called a sports drink and suchlike, and oxygen, for which this combination is one suitable method of use.

# Background to the Invention

So-called sports drinks, which have a comparatively small amount of sugar and have excellent absorbability by the digestive organs, have become widespread. Now if energy consumption caused by movement becomes excessive during excercise, re-hydration is of course required; but for oxygen, too, it is not possible to take in the necessary amount of oxygen by breathing alone and, if prolonged, fatigue increases markedly. Because of this, oxygen is inhaled as well as carrying out re-hydration after the end of athletic competition, for example, and suchlike.

# Technical Items for Development

The present invention is one that has been made in the light of such a background. It is one that aims to develop a new drinker where attention is focussed on this sort of sports drink and oxygen that are to be drunk or sucked in after exercise and, by combining these, to carry out re-hydration and recovery from fatigue effectively after exercise.

#### Structure of the Invention

# Means of Achieving the Aim

That is to say, the drinker of this invention is one characterised in that it combines an oxygen container filled with oxygen with a main container that is sealed and filled with a liquid drink and part of the oxygen container is opened during drinking; and it is made so that oxygen is drawn in alone or imbibed in a state where it is mixed with the liquid drink. By means of this the said aim is to be achieved.

#### Operation

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As the present invention thus combines a main container filled with a liquid drink and an oxygen container filled with oxygen, oxygen can be taken in directly from the oxygen container or in a state where it is dissolved in the liquid drink and intake of liquid and replenishment of oxygen can be carried out in one action.

#### Practical Embodiments

An explanation of the present invention will be given below in concrete terms, based on the practical embodiments shown in the diagrams. 1 is a drinker of this invention. A long cylindrical can is taken as an example. In further detail, drinker 1 in this specification is one that denotes and defines a combined body with a container structure whose inside is filled with liquid drink L and oxygen A. Drinker 1 has main container 2, which accommodates liquid drink L, and oxygen container 3, which accommodates oxygen A and which is inserted in a state where it is housed in the inside of it. Of course, in view of the internal pressure of what main container 2 and oxygen container 3 are respectively filled with and suchlike, they are constructed with a degree of strength that

will adequately withstand this. Furthermore, main container 2 is provided with opening plug part 5 on top part 4. This is the so-called pull open type. Part of top part 4 is preworked so that it is pulled up as tongue piece 6 and in addition it is provided integrally with ring part 7 for pulling it up. Also, lid 9, made of plastic, for example, is provided so as to cover top part part 4 of main container 2. This lid 9 is used for holding oxygen discharge pin 10 or straw 11 for sucking. Furthermore, oxygen discharge pin 10 is pushed in from discharge pin guide part 12 in top part 4, for example, and with its bottom end it pierces through oxygen container 3 nearly at the bottom and makes an opening. Oxygen container 3 is constructed with the concave part 3a for discharge configured in a torus shape at the bottom, as shown in the cross section in Fig.2, so that the operation of oxygen discharge pin 10 is executed reliably. It is constructed in such a way that, even if . oxygen discharge pin 10 is pushed in in an offhand way from the outside, its end can reliably pierce and open part of oxygen container 3. Moreover, it is desirable that thin film 15 or suchlike made of synthetic resin should be formed as an inside layer at opening plug part 5. By this it is so made that drinking can be done by pushing piercing part 11a of drinking straw 11 through opening plug part 5 after removal of tongue piece 6. In passing, the reason for making it like this is to prevent oxygen leaking uselessly to the outside of main container 2. Moreover, it is desirable to provide plug part 16 for oxygen aspiration so that oxygen can be directly sucked in from the bottom of drinker 1. This item is similarly provided with thin film 17 on its inside. When oxygen only is sucked in on its own, imbibing straw 11 is pushed in so as to pierce thin film 17 and it is used for direct sucking in.

One practical embodiment of drinker 1 of the present invention has an embodiment structure as described above and it is used as follows. First of all, when imbibing oxygen A together with liquid drink L, oxygen discharge pin 10 is pushed in from discharge pin guide part 12, as shown in Fig.2, pierces concave discharge part 3a of oxygen container 3 positioned inside main container 2 and makes an opening in it. Through this, the state becomes one where oxygen A inside oxygen container 3 diffuses into liquid drink L and is dissolved in it to a certain extent. Of course, if it cannot all dissolve it stays as bubbles. Next, opening plug part 5 is pealed off, as shown in Fig.2 [sic] and, pushing imbibing straw 11 in through thin film 15 inside it, liquid drink L in which oxygen A is dissolved is drunk. Moreover, it is desirable for imbibing straw 11 to be provided with flange 11b close to the middle part of it and for the part above this to be made, for example, partly flexible. On the other hand, when drawing in oxygen only on its own, oxygen intake plug part 16 is opened, as shown in Fig.3, imbibing straw 11 is pushed in through thin film 17 inside it and used for directly sucking in oxygen.

One practical embodiment of the present invention is as described above, but, furthermore, oxygen container 3 can take a form such as the following, for example, based on the same technical concept. That is to say, as shown in Fig.4, oxygen container housing part 19 is formed in the bottom of main container 2. Oxygen container 3 is positioned here, for example. This oxygen container 3 is provided with discharge part 20 and projecting part 21 facing each other inside oxygen container 3. By squeezing oxygen container housing 19 from the outside, for example, projecting part 21 is pushed into discharge part 20, making a hole in oxygen container 3, and oxygen A is discharged into main container 2. Of course, when there is a configuration like this it is not necessarily suitable for sucking in oxygen A alone, but it is an effective means when imbibing by dissolving oxygen A in liquid drink L.

#### Effect of the Invention

As the present invention combines liquid drink L with oxygen A, as described above, it becomes an extremely suitable drinker for cases such as those where it is necessary to rehydrate and where oxygen intake is insufficient during exercise and suchlike. Of course, if it is made so that oxygen A only can be drawn in on its own, it becomes possible to escape, although not necessarily for long, while inhaling oxygen A in cases where noxious gases and suchlike are produced when fires occur, for example.

# 4. Brief Explanation of the Diagrams

Fig.1 is an oblique view showing a partial section of a drinker of this invention. Fig.2 is a vertical section of the above. Fig.3 is an oblique view showing the situation looking at the above from the bottom. Fig.4 is a vertical section showing another practical embodiment of the oxygen container.

- 1 drinker
- 2 main container
- 3 oxygen container
- 3a concave discharge part
- 4 top plate
- 5 opening plug part
- 6 tongue piece
- 7 ring part
- 9 lid
- 10 oxygen discharge pin
- 11 imbibing straw
- 11a insertion part
- 11b flange
- 12 , discharge pin guide part
- 15 thin film
- 16 oxygen intake plug part

- 17 thin film
- 19 oxygen container housing part
- 20 discharge part
- 21 projecting part
- A oxygen
- L liquid drink

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